DECLARATION

I, Kenji Makishima, 36-404 Komayose, 5683-7 Ohba, Fujisawa-Shi, Kanagawa-Ken, Japan do solemnly and sincerely declare that I well understand the Japanese language and English language and the attached English version is full, true and faithful translation of the certified copy of the Japanese Patent Application No. Hei 11-315901.

And I made this solemn declaration conscientiously believing the same to be true.

This 20th day of May, 2004

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[Document Name]   Specification

[Title of the Invention]   Inquiry reply apparatus, method for replying to inquiry, information recording medium readable by a computer and recorded a program having function to reply to inquiry, and transmission medium for

5   transmitting a program having function to reply to inquiry

[Scope of the Claims]

[Claim 1]

An inquiry reply apparatus for replying to an inquiry from arbitrary person; the inquiry reply apparatus characterized by comprising:

10   priority information storing means for storing information regarding priority assigned to the arbitrary person; and

reply means for replying to the inquiry in consideration of said priority assigned to the arbitrary person when the inquiry from the arbitrary person occurs.

15   [Claim 2]

An inquiry reply apparatus as claimed in Claim 1, further comprising:

priority setting means for setting priority upon replying to the inquiry from the arbitrary person.

[Claim 3]

20   An inquiry reply apparatus as claimed in Claim 1, further comprising:

solution storing means for storing solutions to solve respective inquiry from the arbitrary person.

[Claim 4]

An inquiry reply apparatus as claimed in Claim 3, further comprising:

25   communicating means for changing the priority of the arbitrary person when resolution to solve the inquiry from the arbitrary person in said resolution storing means and for communicating to other reply means together with the inquiry.

[Claim 5]

30   Method for replying to an inquiry from an arbitral person, characterized by that, wherein:

information relating to priority upon replying is stored in a priority information storing means by each arbitrary person; and

the reply is done in consideration of the priority assigned to the

35   arbitrary person by a reply means when an inquiry occurs from the arbitrary person.

[Claim 6]

Method for replying to an inquiry as claimed in Claim 5, further

comprising the step of:

  priority setting step for setting said priority upon replying to an inquiry from the arbitrary person by priority setting means.

[Claim 7]

5 Method for replying to an inquiry as claimed in Claim 5, further comprising the step of:

  means coupled to said reply means for communicating to said replying means, wherein

  when the solution for said information is not stored in said solution 10 storing means, the priority for the information is revised and thus revised priority is supplied to said reply means.

[Claim 8]

  An information recording medium recorded a program readable by a computer, said program having function to reply to an inquiry from arbitrary 15 person, characterized by the recorded program having function, where

  information relating to priority upon replying to an inquiry assigned to each arbitrary person is stored in a priority storing means by the arbitrary person; and

  replying to each of said inquiry in consideration of said priority when 20 said inquiry occurs.

[Claim 9]

  An information recording medium recorded a program readable by a computer as claimed in Claim 8, wherein said program further comprising the step of:

25 setting said priority information upon replying to an inquiry by priority setting means.

[Claim 10]

  An information recording medium as claimed in Claim 8, said program further comprising the step of:

30 storing priority information upon replying to an inquiry assigned to each inquiry at every time when each of said inquiry is done; and

  replying to each of said inquiry in consideration of said priority information when said inquiry occurs.

[Claim 11]

35 An information transmitting medium for transmitting a computer program having function to reply to an information, said computer program executes the steps of:

  storing priority information upon replying to an inquiry assigned to

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each inquiry at every time when each of said inquiry is done; and

replying to each of said inquiry in consideration of said priority information when said inquiry occurs.

[Detailed Explanation of the Invention]

5   [0001]

[Technical Field to Which This Invention Pertains]

This invention relates to an inquiry reply system for replying to an inquiry from arbitrary person, method for replying to inquiry, information recording medium readable by a computer and recorded a program having

10   function to reply to inquiry, and transmission medium for transmitting a program having function to reply to inquiry.

[0002]

[Prior Art]

Various people become to use information terminals or personal

15   computers owing to the remarkable development of the information processing industry in recent years. As many people become to operate computer or the like, many inquiries about operations are done to support centers of makers. In addition, even experts of system developer ask to these support centers in order to break off troubles upon development system.

20   In the support center upon carrying out such after care for general products, a service to reply such complaint are started by priority with payment. In case of replying to such inquiries by telephone, the number of telephone lines has to be increased depending on the priority for the inquiry. Namely, the number of reply stuffs is changed in accordance with the priority

25   in the support center. Further in consideration of impossibility of proper reply by a replier, a secondary replier having more technical knowledge is to be prepared. In such case, contents of the inquiry are directly delivered to the secondary replier, and processed.

[0003]

30   [Problems to be solved]

But the inquiries to the support center increase year by year, and there are many cases where the reception desk cannot finish replying. In such case, inquiries are also delivered to the secondary replier, but the secondary replier also has many inquiries to reply so that it is impossible for the secondary

35   replier to reply to the inquiries properly and quickly by only delivering such inquiries directly to the secondary replier. In other words the secondary replier does not understand the priority of the contents of the inquiry and accordingly, as the result, the secondary replier does reply just in time series of

the incoming inquiries.

The contents of the inquiry related to complaints that the secondary replier has to reply often include important matters that cannot be replied by the reception desk, so that the reply such as this may cause to be a fatal
5   trouble.
[0004]

Accordingly, in order to overcome the above mentioned problems, it is an object of the present invention to propose an inquiry reply apparatus capable to reply quickly and properly to an inquiry, method for replying to
10   inquiry, information recording medium readable by a computer and recorded a program having function to reply to inquiry, and transmission medium for transmitting a program having function to reply to such inquiry.
[0005]

[Means for Solving the Problem]
15   According to the invention claimed in Claim 1, the above object is achieved by a inquiry reply apparatus characterized by comprising, in a inquiry reply apparatus for replying to an inquiry from arbitrary person, a priority information storing means for storing information relating to priority assigned to the arbitrary person and a reply means for replying to the inquiry in
20   consideration of the priority given to the arbitrary person when the inquiry from the arbitrary person occurs.
[0006]

According to the invention claimed in Claim 5, the above object is achieved by method for replying to an inquiry from an arbitral person, the
25   method is characterized by information relating to priority upon replying is stored in a priority information storing means by each arbitrary person; and the reply is done in consideration of the priority assigned to the arbitrary person by a reply means when an inquiry occurs from the arbitrary person.
[0007]

30   According to the invention claimed in Claim 8, the above object is achieved by an information recording medium recorded a program readable by a computer, said program having function to reply to an inquiry from arbitrary person, characterized by the recorded program having function, where information relating to priority upon replying to an inquiry assigned to each
35   arbitrary person is stored in a priority storing means by the arbitrary person; and replying to each of said inquiry in consideration of said priority when said inquiry occurs.
[0008]

According to the invention claimed in Claim 11, the above object is achieved by an information transmitting medium for transmitting a computer program having function to reply to an information, said computer program executes the steps of: storing priority information upon replying to an inquiry

5 assigned to each inquiry at every time when each of said inquiry is done; and replying to each of said inquiry in consideration of said priority information when said inquiry occurs.

[0009]

According to the construction of any of Claim1, Claim 5, Claim 8, or

10 Claim 11, the priority information storing means stores information relating to priority upon reply corresponding to each of an inquiry from an arbitrary person. When the inquiry is issued from the arbitrary person, the reply means replies to the inquiry from the arbitrary person in consideration of the priority assigned to the arbitrary person.

15 Accordingly the arbitrary person who issued the inquiry can obtain reply not in the order of the inquiring sequence but based on the priority assigned. On this account if appropriate priority is set and stored in the priority information table, the arbitrary person can receive a quick and appropriate reply to his or her inquiry. For example, even if the inquiry from

20 the arbitrary person is very important inquiry, such inquiry is also replied quickly and adequately only by properly setting the priority of the priority information table.

[0010]

The invention claimed in Claim 2 is characterized by comprising a

25 priority setting means for setting priority upon replying to the arbitrary person in the Claim 1.

The invention claimed in Claim 6 is characterized by comprising a priority setting means for setting priority upon replying to the arbitrary person in the Claim 5.

30 The invention claimed in Claim 9 is characterized by the recorded program having an inquiry reply function including a step for setting priority upon replying to the arbitrary person by said priority setting means in the Claim 8.

[0011]

35 According to the construction of any of Claim2, Claim 6, or Claim 9, the arbitrary person receives the reply properly and quickly if setting and revision are properly done to the priority of the priority information storing means by the priority setting means.

Further the reply means checks if the arbitrary person who issued the inquiry is a correct person registered in the priority information storing means, and can reply only to previously registered arbitrary person.
[0012]

5 　　　　　The invention claimed in Claim 3 is characterized by comprising solution storing means for storing solutions to solve respective inquiry from the arbitrary person in the construction of Claim 1.

　　　　　According to the construction in Claim 3, the reply means obtains solution method stored in the solution method storing means when an inquiry

10 is issued by an arbitrary person, and presents the solution method to the inquired person properly. Accordingly, the arbitrary person can receive a quick and proper reply to the inquiry.
[0013]

　　　　　The invention claimed in Claim 4 is characterized by communicating

15 means for changing the priority of the arbitrary person when resolution to solve the inquiry from the arbitrary person in said resolution storing means and for communicating to other reply means together with the inquiry in the construction in Claim 3.
[0014]

20 　　　　　The invention claimed in Claim 7 is characterized by means coupled to said reply means for communicating to said replying means, wherein when the solution for said information is not stored in said solution storing means, the priority for the information is revised and thus revised priority is supplied to said reply means in the construction in Claim 5.

25 [0015]

　　　　　An information recording medium as claimed in Claim 8, said program further comprising the step of:

　　　　　　storing priority information upon replying to an inquiry assigned to each inquiry at every time when each of said inquiry is done; and

30 　　　　　replying to each of said inquiry in consideration of said priority information when said inquiry occurs.
[0016]

　　　　　According to the construction of any of Claim1, Claim 5, Claim 8, or Claim 11, the priority information storing means stores information relating to

35 priority upon reply corresponding to each of an inquiry from an arbitrary person. When the inquiry is issued from the arbitrary person, the reply means replies to the inquiry from the arbitrary person in consideration of the priority assigned to the arbitrary person.

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Accordingly the arbitrary person who issued the inquiry can obtain reply not in the order of the inquiring sequence but based on the priority assigned. On this account if appropriate priority is set and stored in the priority information table, the arbitrary person can receive a quick and

5 appropriate reply to his or her inquiry. For example, even if the inquiry from the arbitrary person is very important inquiry, such inquiry is also replied quickly and adequately only by properly setting the priority of the priority information table.

[0017]

10 [Mode for Carrying out the Invention]

A suitable mode for carrying out the present invention is explained with reference to the attached drawings as follows.

In this case, the following mode for carrying out is a suitable concrete embodiment of this invention, and many desirable and technical restrictions

.15 are stated, but the scope of this invention is not limited to these configuration so long as there is not a mention in particular to limit this invention in the following discussion.

Fig. 1 is a construction of system showing a simply exemplified construction of a network system 10 including a help desk system 1 as the

20 suitable mode for carrying out the present invention.

The network system 10 in Fig. 1 is one example of the mode that a user 5 does an inquiry to a help desk 11, for example, and it is needless to say that alternatively the user 5 may be asking to the help desk 11 directly or indirectly.

[0018]

25 For example, the network system 10 has plural computers 7, a network 3 (transmission medium), and the help desk system 1 (inquiry reply system) and further preferably has a secondary reply system 9 (other reply system). This help desk system 1 and the secondary reply system 9 constitute a support center 39, for example.

30 [0019]

The computers 7 are respectively a personal computer as one example of an electronic device that the user 5 (arbitrary person) uses. The 「electronic device」 mentioned here at least has a function to connect to the network 3 and to connect to inquire to the later explained help desk system 1. In the

35 computer 7, in addition to a basic software (OS : Operating System) an application software to transmit and receive E-mail.

[0020]

The user 5 is a person who makes an inquiry about indistinct matter

regarding the operation of his own apparatus to the support center. Of course there are a plurality of users 5 each makes inquiry to the support center. The contents of the inquiry and their importance are respectively different in every user 5, and the replies should not be done in time sequence of the occurrence of

5　the inquiries.

[0021]

The network 3 may be an Internet, an Intranet or a LAN (Local Area Network), for example. The network 3 is connected to plural computers 7, the help desk system 1 and the secondary reply system 9 through a predetermined

10　transmission line. In this case, the network 3 is required only to be able to communicate data among electronic devices such as computers, and a wireless data communication system is also available.

[0022]

The help desk system 1 is a computer operated by a replier 11 (here in

15　after mentioned as 「help desk」) to reply to the inquiry from the user 5. The help desk system 1 is a system to reply to solve the contents of the inquiry to the user 5 who makes the inquiry by such as E-mail, for example. In this help desk system 1, in addition to the basic software, at least a software for transmitting and receiving the E-mail, a database software (data base) and a

20　software having a function for replying to the inquiry from the user 5 are operated. In this case, a concept for the having the function for replying to the inquiry may include the database for managing such as predetermined tables to be mentioned later. The program having the function for replying to the inquiry is a software that controls an operation of the help desk system 1, for

25　example.

[0023]

The help desk system 1 replies to a normal inquiry from the user 5 and when the solving of the inquiry is technically difficult, a notice is transferred to the secondary replier 13. In this case, the revised priority is reported to the

30　secondary replier 13, for example. Accordingly the secondary replier 13 can reply precisely and quickly.

[0024]

Next, the secondary reply system 9 is a system that is working on a computer operated by the secondary replier 13 (secondary replier), for example.

35　In this secondary reply system 9, in addition to a basic software, at least a software for transmitting and receiving the E-mail is working. The secondary reply system 9 is arranged in order to solve the contents of the inquiry that are difficult to solve by the help desk 11. The secondary replier 13 recognizes

through the secondary reply system 9 that there are inquiries that are not able to reply by the help desk 11 via the notice of the E-mail from the help desk system 1. Of course, it is needless to say that such notice may be done by oral or other way.

5 [0025]

Fig. 2 is a block diagram showing one example of a hardware construction of the help desk system 1 in Fig. 1.

Because the computer 7 and the secondary reply system 9 are almost the same hardware constructions as that of the help desk system 1, so that the

10 explanation is omitted and only the help desk system 1 is explained as one representative example in the following discussion.

For example, the help desk system 1 has a control section 21, a display section 23, an input section 25, a storage section 29 and an IF section 31.

[0026]

15 The control section 21 is connected to the display section 23, the input section 25, the storage section 29 and the IF section 31, respectively. The control section 21 includes a CPU (Central Processing Unit), for example, and controls the display section 23, the input section 25, the storage section 29 and the IF section 31 to be connected thereto. The display section 23 is a liquid

20 crystal display or a Brown Tube display, for example. The input section 25 is an information entering device such as a keyboard or a mouse or something like that. The storage section 29 is a magnetic disc such as hard disc as a large scale recording apparatus and stores data for the above mentioned database. In this case, the storage section 29 may be information recording

25 medium such as an optical disc or a magneto-optical disc other than above. In addition, for example, the storage section 29 may contain a memory as working area of the control section 21 and as working area of each of the above mentioned respective operating programs. The IF section 31 is a network interface card, for example, and has a function to connect to the network 3.

30 [0027]

Fig. 3 is a software configuration showing one example of the software construction of the help desk system 1 in Fig. 1. The help desk system 1 has a customer priority information table 15 (priority information storing means), a priority setting section 37 (priority setting means), a reply section 35 (reply

35 means, communication means) and a data transmitter/receiver section 33 (communication means).

In the customer priority information table 15, an information (customer priority information 15a to be described later in Fig. 4) relating to the priority

upon replying to the inquiry from a user 5 who takes predetermined registration are stored. The user 5 who is not registered in the customer priority information table 15 can not receive the support service, for example. The priority setting section 37 can set the reply priorities to every user, and the

5   customer priority information 15a is stored in the priority information table 15. In this case, the priority setting section 37 may set the priority based on each of the contents of the inquiry or combination thereof, for example.

[0028]

The reply section 35 works by operation of the help desk 11, and replies

10   to the inquiry based on the priority as stated above, for example. To be more concrete, the reply section 35 searches corresponding reply examples stored in the inquiry information managing section 17 to be explained later based on the contents of the inquiry as a search key and gets. The data transmitter/receiver section 33 is the E-mail software, for example, and

15   executes communications between the inquiring user 5 and transmits thus obtained reply.

[0029]

The network system including the help desk system 1 is configured as mentioned above, and reply method for inquiry is explained next with reference

20   to Figs 1 to 5.

Fig. 4 is a drawing showing one example of the flow in which the user 5 does an inquiry to the help desk 11, and Fig. 5 is an image drawing for showing one example of a flow in which the user 5 does an inquiry to the help desk 11.

For example, the user 5 purchases an electronic device of a specified

25   maker, and becomes a user. Operations of the recent electronic device becomes more complex and difficult while being equipped with high performances, and accordingly the user 5 has to frequently do the inquiry to the support center 39 of the maker. The help desk system 1 is arranged in the support center 39 in order to reply to such inquiry from the user 5, and in

30   addition, a secondary reply system 9 (of the secondary replier 13) is further provided in order to reply to the inquiry that cannot be replied by the help desk 1 (of the help desk 11) due to the difficulty of the inquiry. The user 5 asks by the E-mail (may be done orally, for example) to the help desk 11 (an inquiry step ST1).

35   [0030]

The help desk 11 searches the customer priority information table 15, confirms (confirmation step ST2) by judging if the user 5 is registered, and informs otherwise to the user 5 not to obtain support service. As shown in Fig.

11

4, the help desk 11 searches the inquiry information management section 17 with the contents of the inquiry from the user 5 as a search key, and further additionally registers such contents of the inquiry (search & adding step ST3).
[0031]

5   The inquiry information management section 17 may consist of an intranet bulletin board working in the computer of the help desk system 1, for example. This intranet bulletin board may be constituted by a system utilizing a Web, or Notes (Trade Name) for example. The inquiry information management section 17 stores the inquiry information 17a and supplies the

10   solution method included in the inquiry information 17a in response to the inquiry from the help desk 11. The inquiry information management section 17 stores the inquiry information 17a including past settled solution method and a history of the inquiry.
[0032]

15   Namely, at first the help desk 11 inquires to the inquiry information 17a and compares with the past inquiry.
   If there is the same, the information is reported to the user 5. For example, the reply "confirm power supply" or the reply "confirm cable" in the inquiry information 17a is reported or notified to the user 5 through the help

20   desk 11 as a reply for the inquiry "cannot print" in Fig. 5.
[0033]
   If there is the same inquiry but no solution is registered, this means that the reply to the previous inquiry is not done yet. Namely this corresponds to a "not replied yet" for the inquiry "cannot copy" in the inquiry

25   information 17a in Fig. 5, for example.
   The priority to the inquiry is determined by a calculation rule as shown below at the reply section 35 in Fig. 3. As a numeric value becomes larger, the priority in Figs. 4 & 5 has higher priority.
[0034]

30   The priority is calculated by only adding each user priority assigned to each of the inquiry information from a generally registered user or a specially registered user in a first example of the priority calculation rule. As shown in Fig.4, each user has own user priority point as stored in the priority information 15a. Suppose the user is "A" and " B" in Figs. 4 & 5 and both

35   users A and B ask the same contents of the inquiry, for example. In this case the priority to the contents of this inquiry is calculated as 0+1=1. In addition, the priority becomes 1+1=2 if, for example, if those user are "B" and " C". Further in the case where the same content of the inquiry are done by users

12

"B", " C" and "D", the calculated priority becomes 4 by the calculation 1+1+2=4. Accordingly among three examples, the last case has the highest priority and should be replied at first among three cases.

[0035]

5　　　　In a second example of the priority calculation rule, the priority is changed in accordance with each priority assigned to each of the inquiry information from a general user or a specified user and the order of the same contents of the inquiry done to the support center 39.

Suppose the user is "A" and " B" in Figs. 4 & 5 and the user " B" asks

10　the same contents of the inquiry after the user "A", for example. In this case the priority of the contents of the inquiry is calculated as (user priority for the user "A") x 1 (first inquiry) + (priority for the user "B") x 2 (second inquiry) = 0 x 1 + 1 x 2 = 2.

In addition, if the user " C" asks the same contents of the inquiry after

15　the user "B", for example. In this case the priority of the contents of the inquiry is calculated as (user priority for the user "B") x 1 (first inquiry) + (user priority for the user "C") x 2 (second inquiry) = 1 x 1 + 1 x 2 = 3. Further if the users "B", "C" and "D" inquire the same contents to the support center 39 in this order, the finally determined priority becomes 1 + 1 x 2 + 2 x 3 = 9.

20　Accordingly among three examples, the last case has the highest priority and should be replied at first among three.

[0036]

In addition, in the another case for the priority calculation rule, the priority may be determined based on a company or a department of a company

25　to which the user belongs. Further in this case, the inquiry from the same company and the department may not be considered in calculating the priority. As further another example of the calculation rule of the priority, an inquiry route (E-mail, Telephone, etc) of the inquiry and the time of day of the inquiry may be considered when deciding the priority.

30　[0037]

The help desk 11 notifies to the secondary replier 13 the search result (for example, the contents of the inquiry and the priority thereof) at a notice step ST4 if the notice is necessary. The notice is done or is not done in the following manner.

35　　　　(1) The notice to the secondary replier 13 is necessary.

* When a new inquiry for the secondary replier 13 is done.

* When the user 5 of higher priority asked the same inquiry which is not replied yet.

(2) The notice to the secondary replier 13 is not necessary.

When the priority for the inquiry does not change greatly as a result that user 5 having low user priority newly does an inquiry to the same inquiry already registered but not replied yet.

5 [0038]

When the above described new inquiry is done, the help desk 11 writes on the intranet bulletin board about the inquiry from the user 5 and notifies to the secondary replier 13 the calculated priority of the inquiry. The secondary replier 13 who is informed the inquiry from the help desk 11 confirms the

10 inquiry and prepares a reply to the inquiry (confirmation & reply step ST5).

[0039]

When the secondary replier 13 finds a solution for the inquiry, the solution for the inquiry is written in the inquiry information management section 17. Further the secondary replier 13 informs to the help desk 11 who

15 transfers the inquiry at a reply step ST6. Then, the help desk 11 refers to the history of inquiry information managed in the inquiry information management section 17, and report it to the user 5 who does the inquiry at a reply step ST7. When there is another user who does the same inquiry in addition, the reply is also served to such another user.

20 [0040]

According to above described embodiment of this invention, following effects can be expected. For example, according to the above described embodiment of the present invention, the user 5 can obtain necessary information not in the order of the inquiring sequence but based on the

25 calculated priority. On this account if appropriate priority is set and stored in the priority information table 15, the user 5 can receive a quick and appropriate reply to his or her inquiry from the support center 39. For example, even if the inquiry from the user 5 is very important inquiry, such inquiry is also replied quickly and adequately only by properly setting the

30 priority of the priority information table 15.

[0041]

In addition, according to above described embodiment of the present invention, the priority of the priority information table 15 is set and revised by the priority setting section 37, the reply to the user 5 is done quickly and

35 adequately. Of course the reply section 35 checks whether the user 5 of the inquiry is a registered user in the priority information table 15, and the reply is done only to the registered user.

[0042]

Further according to above described embodiment of the present invention, the reply section 35 acquires the solution method stored in the priority information table 15 when there occurs an inquiry from an arbitrary user. Then replies to the user using thus acquired solution method.

5 Accordingly the any registered user 5 can receive the proper reply that is appropriate as well for the inquiry.

[0043]

In addition, according to the above described embodiment of the present invention, if the reply section 35 judges that a solution method for the inquiry

10 from the user is not stored in the priority information table 15, the priority of the inquiry from the user 5 is changed and thus revised priority is notified to the secondary reply system 9 with the contents of the inquiry by way of the reply section 35 and the data transmitter/receiver section 33 controlled by the reply section 35. Accordingly the secondary reply system 9 can reply quickly

15 with appropriate order after having recognized priority of the user 5.

[0044]

1) The support center 39 can effectively reply to the inquiry from the user 5 without increasing the number of the help desk 11 by assigning user priority to each user 5; and

20 2) The help desk system 1 can alter the priority of the inquiry in accordance with the number of the users 5 doing the same inquiry.

Accordingly, the help desk system 1 of the present invention can reply to the inquiry from the user 5 quickly and appropriately.

[0045]

25 By the way, this invention is not limited to the mode for carrying out as mentioned above. For example, the help desk 11 regularly generates the inquiry information 17a accumulated in the inquiry information management section 17 as a help file 19 as shown in Fig. 4, and this may be regularly distributed to all or requesting some of the users. In this case the help desk

30 system 1 may regularly distribute the help file 19 reflected the history of the inquiry, solution methods for the inquiry and the number of the same inquiry. Regarding the distribution technical art may be used a known prior art described in Japanese Laid-open publication H10-301760, for example.

The information such as the priority or the number of times for the

35 same inquiry may be reflected to a priority for search using the help file 19. In other words this information may be used as a reference to coordinate position of information as hardware-like data alignment in case of searching.

[0046]

15

The program having inquiry reply function as described above may be in a mode stored in information recording medium such as a flexible magnetic disc, a CD (Compact Disc : trademark) or a DVD (Digital Versatile Disc). In addition, the above mentioned program may be recorded in an information

5　recording medium installed in a computer as an electronic appliance connected to a transmission medium such as a network for conducting data communication by either cable or wireless, and the program is downloaded to a computer as an electronic appliance of the user through the network.

[0047]

10　[Effect of the Invention]

As above described, it is possible to present an inquiry reply system for replying quickly and adequately to an inquiry, method for replying to inquiry, information recording medium readable by a computer and recorded a program having function to reply to inquiry, and transmission medium for transmitting

15　a program having inquiry reply function in accordance with the present invention.

[Brief Description of the Drawings]

[Fig. 1]

It is a system configuration chart showing simplified configuration

20　example of a network system including a help desk system as a suitable mode for carrying out the present invention.

[Fig. 2]

It is a block diagram showing one example of a hardware construction of the help desk system in Fig. 1.

25　[Fig. 3]

It is a software configuration chart showing one example of software configuration of the help desk system in Fig. 1.

[Fig. 4]

It is a chart showing one example of flow inquiring to the help desk by

30　the user.

[Fig. 5]

It is an image chart showing one example of flow for inquiring to the help desk by the user.

[Explanation of Code]

35　1......help desk system (inquiry reply apparatus), 3......network (communication medium), 5......user (arbitrary person), 9......secondary reply system (other reply means), 11......help desk, 13......secondary replier, 15......customer priority information table (priority information storing means),

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33......data transmitting/receiving means (communication means), 35.....reply section (reply means, communication means), 37......priority setting section (priority setting means)

5

[Document Name]　　　　　Abstract Sheet

[Abstract]

[Problem]　　　　　To present an inquiry reply system for replying quickly and adequately to an inquiry, method for replying to inquiry, information
5　recording medium readable by a computer and recorded a program having function to reply to inquiry, and transmission medium for transmitting a program having inquiry reply function.

[Solving Means]　　　An inquiry reply apparatus 1 for replying to an inquiry from arbitrary person 5, and there are provided a priority information storing
10　means 15 for storing information relating to priority assigned to the arbitrary person 5 and a reply means 35 for replying to the inquiry in consideration of the priority assigned to the arbitrary person 5 when the inquiry from the arbitrary person 5 occurs.

[Selected Figure]　　　Fig. 4

15

English translation in the drawings

Fig. 1

1	:	help desk system
3	:	network
5	:	user
7	:	computer
9	:	secondary reply system
10	:	network system
11	:	help desk
13	:	secondary replier
39	:	support center

Fig. 2

21	:	control section
23	:	display section
25	:	input section
25	:	storage section
31	:	IF section

Fig. 3

15	:	customer priority information table
33	:	data transmitting/receiving section
35	:	reply section
37	:	priority setting section

Fig. 4

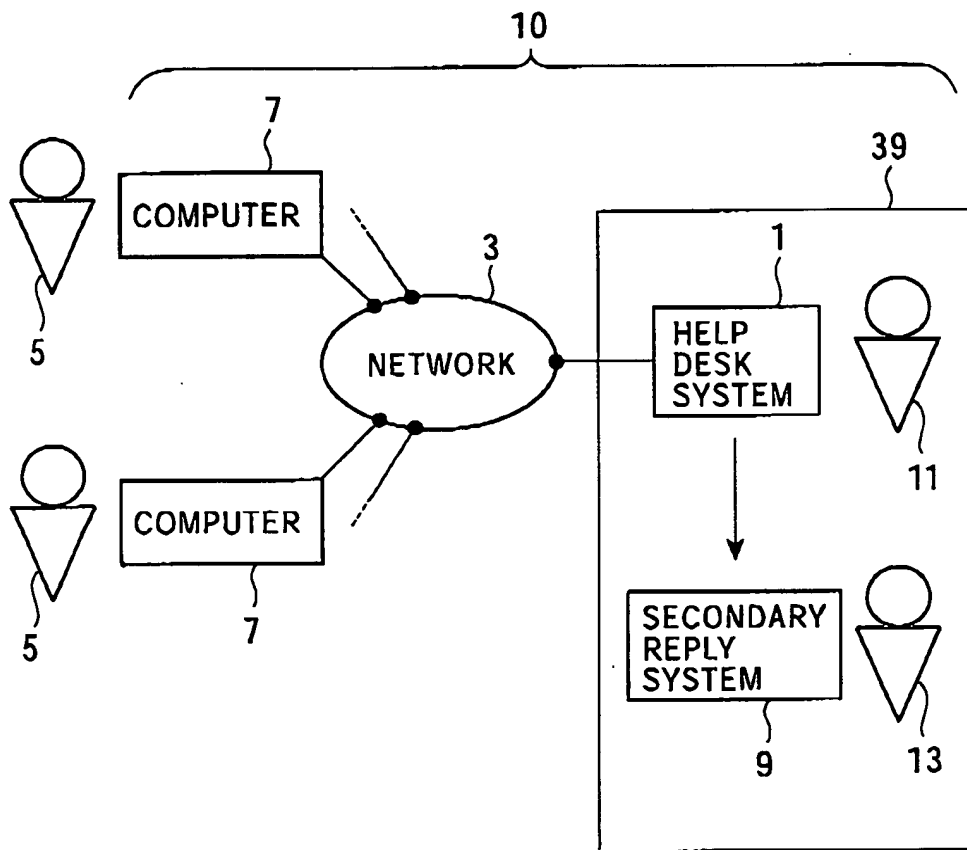|		
5	:	user
11	:	help desk
13	:	secondary replier
15	:	customer priority information table
15a	:	Mr. A : 0
	:	Mr. B : 1
	:	Mr. C : 1
	:	Mr. D : 2
17	:	inquiry information management section
17a	:	inquiry information management section
19	:	help file
ST2	:	confirmation step

19

ST3 : search and addition step

ST4 : communication step

ST5 : confirmation and reply step

ST6 : reply step

5 ST7 :(left) inquiry step

ST7 :(right) reply step

17-19 : regular generation

19-5 : regular delivery

10 Fig. 5

1 : help desk

5 : user

9 : secondary replier

15 : customer priority information table

15 15a : Mr. A : 0

: Mr. B : 1

: Mr. C : 1

: Mr. D : 2

17 : inquiry information management section

20 17a : cannot print :

confirm power supply

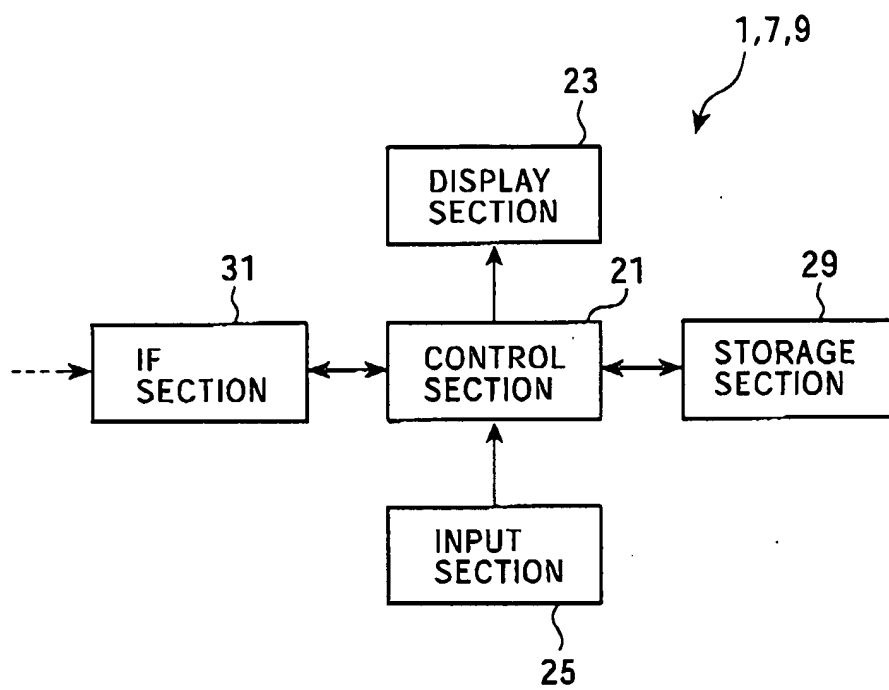confirm cable

cannot copy : not replied yet
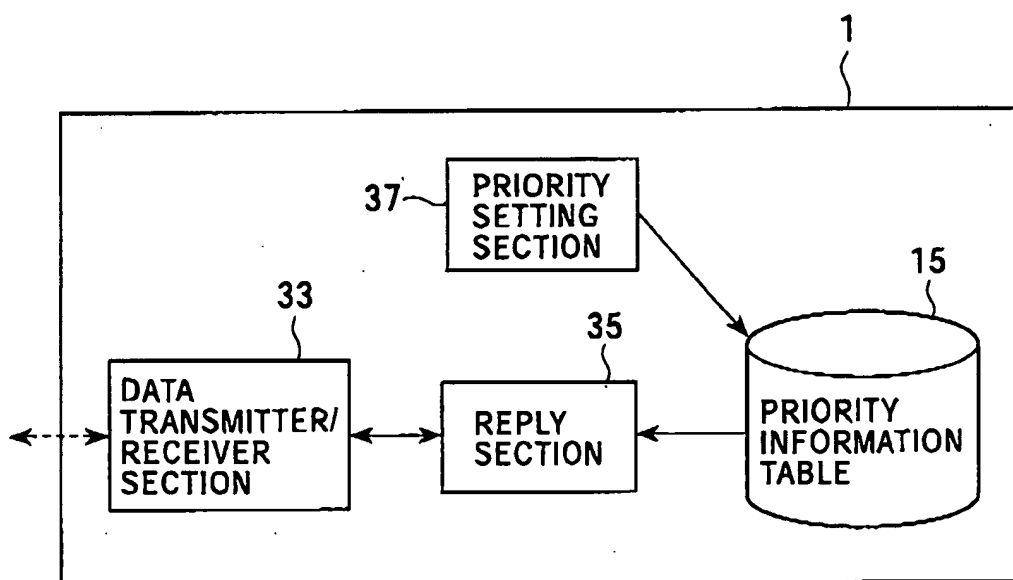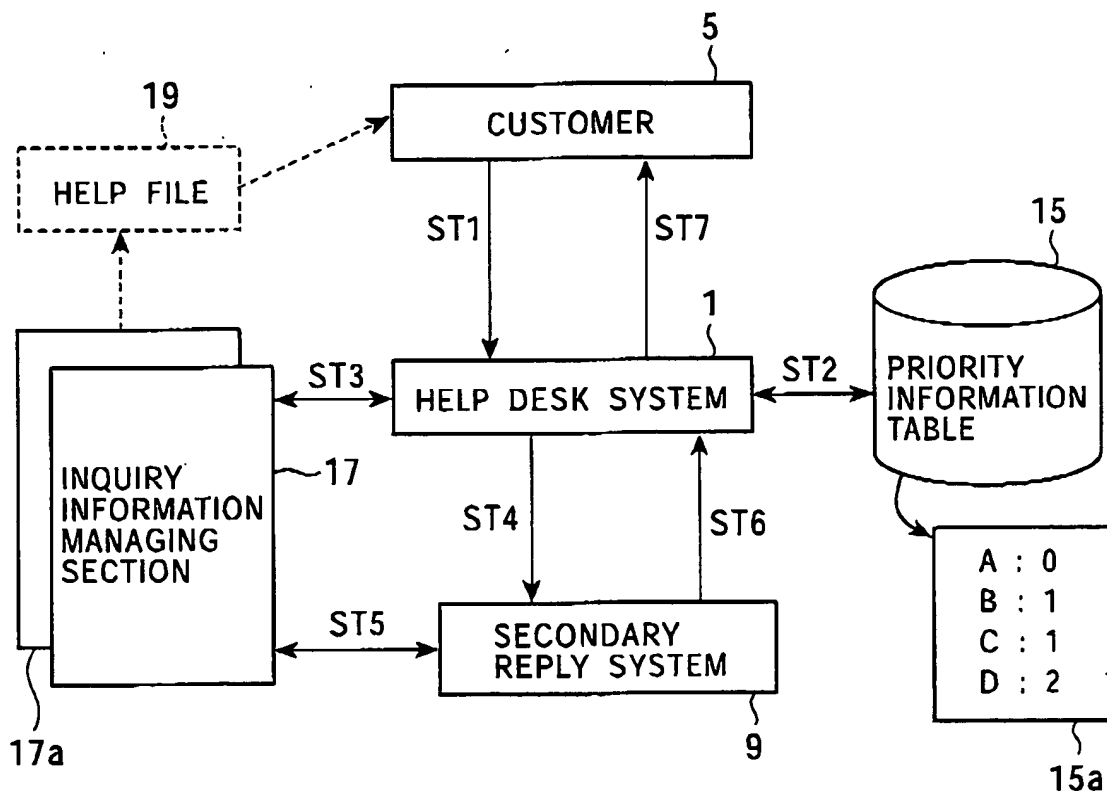
25

1／5

FIG. 1

2／5

FIG. 2

1,7,9
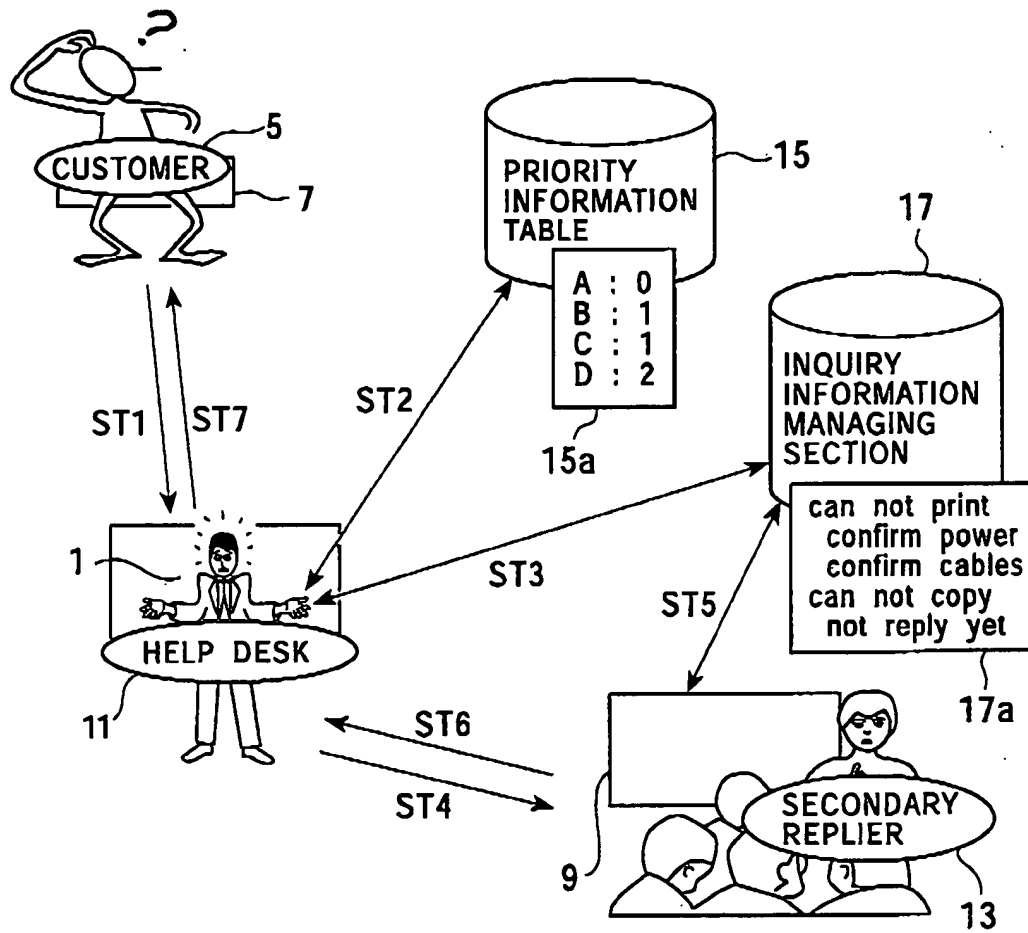
```
                        ┌──────────┐
                        │ DISPLAY  │ 23
                        │ SECTION  │
                        └────┬─────┘
                             ↑
   ┌──────────┐         ┌────┴─────┐         ┌──────────┐
31 │   IF     │ ←────→  │ CONTROL  │ 21 ←──→ │ STORAGE  │ 29
   │ SECTION  │         │ SECTION  │         │ SECTION  │
   └──────────┘         └────┬─────┘         └──────────┘
                             ↑
                        ┌────┴─────┐
                        │  INPUT   │
                        │ SECTION  │
                        └──────────┘
                             25
```

3／5

FIG. 3

```
                              1
    ┌──────────────────────────────────────────────┐
    │                                              │
    │         37┐  ┌──────────────┐                │
    │           └─▶│  PRIORITY    │                │
    │              │  SETTING     │                │
    │              │  SECTION     │                │
    │              └──────────────┘         15     │
    │      33                               ┐      │
    │      ┐              35                ┌────┐ │
    │   ┌────────────┐    ┐    ┌─────────┐ │PRIORITY│
    │   │DATA        │    ┌───────────┐  │INFORMA-│ │
    │ ◀─│TRANSMITTER/│◀──▶│  REPLY   │◀─│TION     │ │
    │   │RECEIVER    │    │  SECTION │  │TABLE   │ │
    │   │SECTION     │    └───────────┘  └────────┘ │
    │   └────────────┘                             │
    │                                              │
    └──────────────────────────────────────────────┘
```

4／5

FIG. 4

5／5

FIG. 5

【図2】

【図3】

記憶部　29

表示部　23

制御部　21

入力部　25

IF部　31

1,7,9

【図4】

【図5】

顧客優先度情報 15a

A さん：0	
B さん：1	
C さん：1	
D さん：2	

15　顧客優先度情報テーブル　顧客情報データベース

確認ステップ ST2

回答ステップ ST6

ヘルプデスク 11

ユーザー 5

回答ステップ ST7

問い合わせステップ ST7

二次対応者 13

通知ステップ ST4

検索＆追加ステップ ST3

確認＆回答ステップ ST5

問合せ情報管理部 17

17a

定期配布

定期生成

ヘルプファイル 19

【書類名】　　　　　要約害
【要約】
【課題】　問い合わせに対して迅速且つ適切に対応することのできる問い合わせ
対応装置、問い合わせ対応方法、問い合わせ対応機能を有するプログラムを記録
したコンピュータ読み取り可能な情報記録媒体及び、問い合わせ対応機能を有す
るプログラムを伝送する伝送媒体を提供すること。
【解決手段】　任意の者５の問い合わせに対応するための問い合わせ対応装置１
であって、前記任意の者５に付与された優先度に関する情報を格納するための優
先度情報格納手段１５と、前記任意の者５からの問い合わせがあると、前記任意
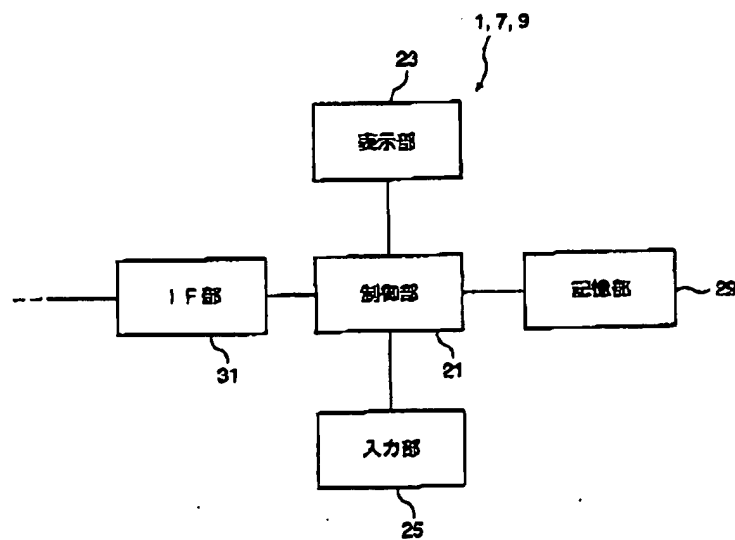の者５に付与された優先度を考慮して問い合わせに対応する対応手段３５とを設
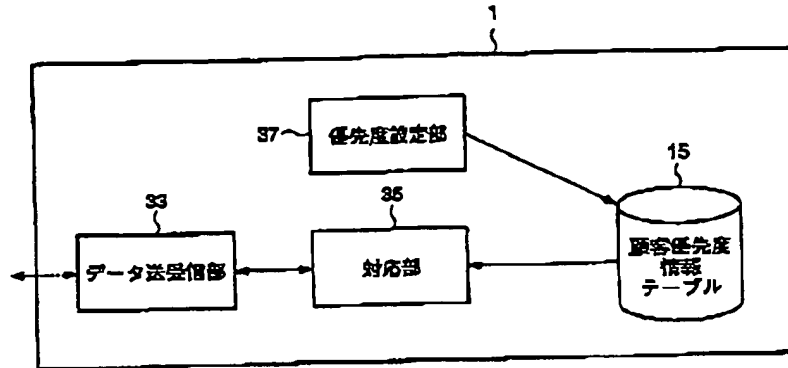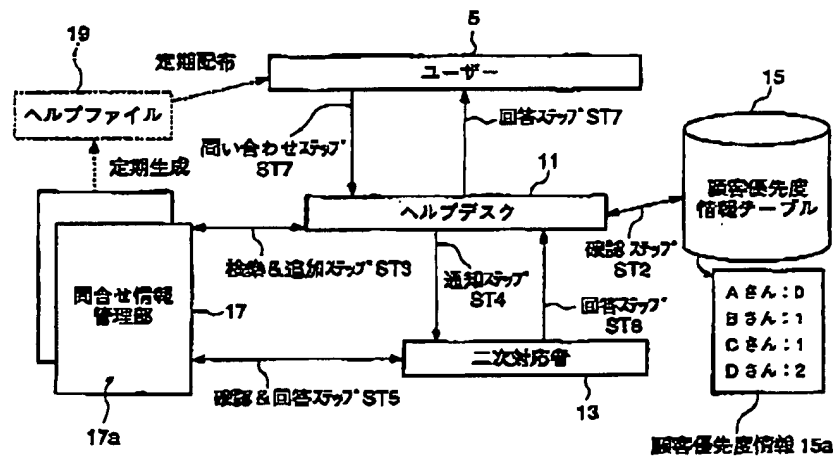ける。
【選択図】　　　　　図４

(8)　　　　　　　特開2001-134657

【図1】
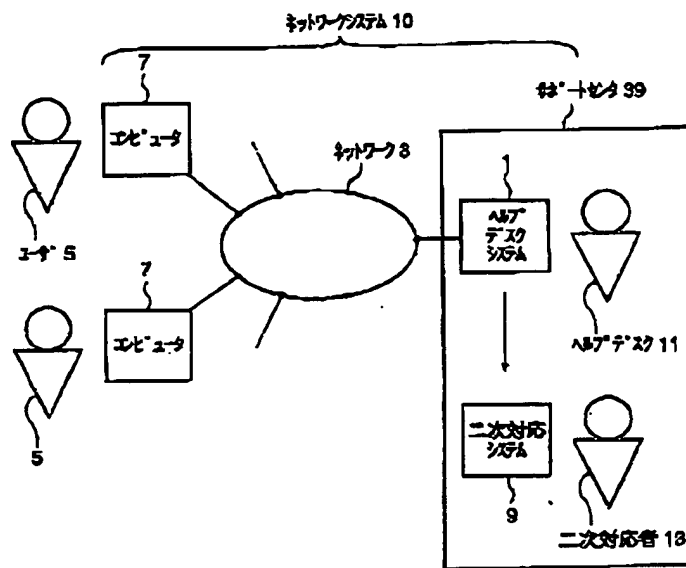
【図2】

(9)　　　　　　　　　　特開2001-134657

【図3】

【図4】

【図5】